1   1.   A method of managing a virtual private network,
2   the method comprising:
3   providing a graphical user interface for displaying
4   one or more virtual private network subscribers and one or
5   more computers offering virtual private network functions,
6   the graphical user interface being programmed to display
7   tunnels associated with either the subscribers and/or the
8   computers offering virtual private network functions based
9   on user input.

1   2.   The method of claim 1, wherein the computers
2   offering virtual private network functions comprise extranet
3   switches.

1   3.   The method of claim 1, wherein the virtual
2   private network functions comprise tunneling.

1   4.   The method of claim 1, wherein the virtual
2   private network functions comprise authentication.

1   5.   The method of claim 1, wherein displaying
2   subscribers and computers comprises displaying a
3   hierarchical tree that includes the subscribers and the
4   computers.

1   6.   A graphical user interface for use in managing a
2   virtual private network, the graphical user interface
3   comprising:
4   a display of virtual private network elements, the
5   different elements being selectable by a user;

6   a collection of palettes that provide virtual
7   private network sub-elements associated with the virtual
8   private network elements, the palette displayed being
9   controlled by user selection of an element; and
10   a collection of properties dialogs that receive user
11   input configuring the virtual private network elements
12   and/or sub-elements, the properties dialog displayed being
13   controlled by user selection of an element from the display
of virtual private network elements.

1   7.   The graphical user interface of claim 6, wherein
2   the display of virtual private network elements comprises a
3   hierarchical tree the displays both virtual private network
4   elements and associated virtual private network sub-
5   elements.

1   8.   The graphical user interface of claim 6, wherein
2   the virtual private network elements comprise subscribers.

1   9.   The graphical user interface of claim 6, wherein
2   the virtual private network elements comprise computers
3   offering virtual private network functions.

1   10.   The graphical user interface of claim 9,
2   wherein the computers comprise extranet switches.

1   11.   The graphical user interface of claim 9,
2   wherein the sub-elements comprise SNMP properties.

1   12. The graphical user interface of claim 9,
2 wherein the sub-elements comprise an authentication
3 technique.

1   13. The graphical user interface of claim 6,
2 wherein the sub-elements comprise tunnels.

1   14. The graphical user interface of claim 6,
2 further comprising modifying a virtual private network
3 element listed in the hierarchical tree by dragging and
4 dropping a virtual private network element from a displayed
5 palette.

1   15. A graphical user interface for use in managing
2 a virtual private network, the graphical user interface
3 comprising:
4   a hierarchical tree that includes different extranet
5 switches, the different extranet switches being selectable
6 by a user;
7   a collection of palettes that provide groupings of
8 extranet switch attributes, the palette displayed being
9 controlled by user selection of an extranet switch; and
10   a collection of properties dialogs that collect
11 information associated with the extranet switch attributes,
12 the properties dialog displayed being controlled by user
13 selection of an element.